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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/010,937
Filing Date: November 13, 2001
Appellant(s): BARANDA ET AL.

David J. Gaskey
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9-16-2008 appealing from the Office action mailed 7-22-2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

See Application serial number 09/921,803, which is before the Board of Appeals and Interferences.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| | | |
|-------------------------|----------------|---------|
| 2,740,459 | Kilborn et al. | 04-1956 |
| 2,194,833 | Nassimbene | 03-1940 |
| 3,848,037 | Harper | 11-1974 |
| 6,727,433 | Tsai | 04-2004 |
| US PUB: 2003/0069101 AI | Pitts et al. | 04-2003 |
| WO 01/14630 AI | Prewo et al. | 03-2001 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-4, 9, 15-16, 20, 24, 28-37, 40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO (01-14630) in view Kilborn et al. (2,740,459). WO (01-14630) discloses an elevator belt (22) comprising a plurality of cords (28, 30) aligned parallel to the longitudinal axis; a jacket (26) made from urethane over the cords, the jacket includes a generally smooth surface. WO (01-14630) does not disclose the cords are tensioned individually while applying the jackets. Kilborn et al. discloses a belt comprising a plurality of cords, which are tensioned individually in order to keep the

belt perfectly aligned thus decreasing the efficiency of the belt (col.1, lines 34-64).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the belt of WO (01-14630) so that each cord is tensioned individually with a selected tension in view of Kilborn et al. in order to keep the belt perfectly aligned thus increasing the efficiency of the belt.

In claims 3 and 4, it is apparent that the tension on each cord would be adjusted to be consistent with the desired configuration.

In claim 9, it is apparent that a cooling operation would be carried out after the jacket has been applied.

Regarding claims 15-16, it is apparent that the method and process steps would be inherently included during the manufacturing of WO (01-14630) and Kilborn et al. device.

In claim 19, note WO (01-14630) clearly discloses the claimed invention including the cords 28 comprises steel.

In claim 20, it is apparent that the method step would be inherently included during the manufacturing of WO (01-14630) in view of Kilborn et al.

In claim 24, the method steps are inherently included in WO (01-14630) discloses the use of polyurethane as a common coating (jacket) for the tensile cords.

In claims 28, 32 and 36 it is apparent that the cords will inadvertently move while applying the jacket to the cord. Note, applicant discloses that it is well know for the cord to move during application of the jacket.

In claims 29-33, 35 and 37, WO (01-14630) and Kilborn et al. inherently discloses the claimed invention.

In claims 34 and 38, it is apparent that the tension forces will be the same on both sides of the applicator because the tension forces will be the same as the reaction forces on the opposite side.

In claims 40 and 42, it is apparent that the cords of in WO (01-14630) are inherently the same construction.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO (01-14630) in view Kilborn et al. as applied to claim 1 above, and further in view of Nassimbene (2,194,833). Neither WO (01-14630) nor Kilborn et al. disclose the cords having different tensioning. Nassimbene discloses a belt having unequal tension in the cords (see col.1, lines 32-36) in order to increase the strength of the belt at the middle to overcome increased load concentration. Therefore, it would a have been obvious to one of ordinary skill in the art at the time of the invention to modify the belt of WO (01-14630) so that the cords have unequal tensioning as disclose by Nassimbene in order to increase the strength of the belt at the middle to overcome the are of increase load concentration.

4. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO (01-14630) in view Kilborn et al. as applied to claim 1 above, and further in view of Harper (3,848,037). WO (01-14630) discloses that the jacket is made from urethane but do not disclose the urethane is a waxless urethane. The used of urethane is equivalent to polyurethane and one can be substitute for the other. Harper a silicone

release agent to obtain a surface free of wax (col. 1, lines 46), Harper also discloses a new method of by which polyurethane moldings having surface free of oily or wax free which may be easily release from the moldings. As is well known in the art, providing a belt free of oily surface is very essential when labeling or providing belt information by painting the information on the belt. Harper also discloses that with the release of oil or wax from the polyurethane molding it would have been impossible for the painting to adhere belt surfaces (col. 2, lines 17-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the jacket of WO (01-14630) so that it is made from waxless urethane in view of Harper in order to ensure better friction, provide a clean and blemish free surface so as to allow the surface to be painted such that the painting will effectively adhere polyurethane material.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO (01-14630) in view Kilborn et al. as applied to claim 1 above, and further in view of Tsai (6,727,433). WO (01-14630) and Kilborn et al. do not disclose the molding device having an opening with a non-linear configuration. Tsai disclose a molding device (70) having an opening from which the molded belt of cable is extruded and the surface of the opening is not linear. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of WO (01-14630) so that the has belt is molds from a mold having non-linear openings in view of Tsai reduce the material of the jacket without compromising the strength of the belt and to provide a belt with non-slipping surface features.

6. Claims 14 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO (01-14630) in view of Harper WO (01-14630) discloses the claimed invention above but does not disclose the polyurethane is waxless polyurethane. Harper also discloses that with the release of oil or wax from the polyurethane molding it would have been impossible for the painting to adhere to the belt surfaces (col. 2, lines 17-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the jacket of WO (01-14630) so that it is made from waxless urethane in view of Harper in order to ensure better friction, provide a clean and blemish free surface so as to allow the surface to be painted such that the painting will effectively adhere polyurethane material.

In claim 41, it is apparent that the cords of in WO (01-14630) are inherently the same construction.

7. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO (01-14630) in view Kilborn et al. as applied to claim 1 above, and further in view of Harper. WO (01-14630) discloses the claimed invention above but does not disclose the polyurethane is waxless polyurethane. The used of urethane is equivalent to polyurethane and one can be substitute for the other. Harper also discloses that with the release of oil or wax from the polyurethane molding it would have been impossible for the painting to adhere belt surfaces (col. 2, lines 17-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the jacket of WO (01-14630) so that it is made from waxless urethane in view of Harper in order to ensure better friction, provide a clean and blemish free surface so as to allow

the surface to be painted such that the painting will effectively adhere polyurethane material.

Regarding claim 18, the process of applying the fluid is inherently included during the manufacturing of WO (01-14630) device.

8. Claims 21-23, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO (01-14630) in view of Harper. WO (01-14630) discloses the claimed invention above but does not disclose the polyurethane is waxless polyurethane. The used of urethane is equivalent to polyurethane and one can be substitute for the other. Harper also discloses that with the release of oil or wax from the polyurethane molding it would have been impossible for the painting to adhere belt surfaces (col. 2, lines 17-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the jacket of WO (01-14630) so that it is made from waxless urethane in view of Harper in order to ensure better friction, provide a clean and blemish free surface so as to allow the surface to be painted such that the painting will effectively adhere polyurethane material.

In claims 22-23 and 27, the method steps are inherently included during the manufacturing of over WO (01-14630) in view of Harper device
Claims 35 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO (01-14630) In view of Harper as applied to claim 24 above, and further in view of Pitts et al. (2003/0069101). WO (01-14630) In view of Harper does not disclose the application of the jacket is continuously and uninterrupted. Pitts et al. disclose the claimed invention in order to create a uniform surface. Therefore, it would have been obvious to one of

ordinary skill in the art at the time of the invention to further modify the device of WO (01-14630) so that the process is carried continuously and uninterrupted in view of Pitts et al. in order to create a uniform surface.

(10) Response to Argument

In response to applicant's arguments to the prosecution of claims 1-9, 14-24 and 26-42,

Regarding argument to the rejection of claims 1, 3-4, 9, 15-16, 20, 24, 28-37, 40 and 42, Applicant contended that the Prewo and Kilburn et al. references cannot be combine as proposed by the examiner, in that the Kilborn technique cannot be used to make a belt as shown in the Prewo reference. Applicant also contended Kilborn et al. shows that the cords resting on a table such that it would have been impossible to apply the jacket material on both sides of the belts. In response, It should be noted that Kilborn et al. discloses that the cables are resting to initially prepare the cables for tensioning and the prevention of tangling or overlaying one another so as to present a uniform appearance; a bonding material is presented on the cable while the cable is on the table so as to bond the cables together with cushion layer (87), (col. 5, lines 38-60). It should also be noted that the clamping member (13) is used to lower and raised the cable section in preparation for the introduction of the fabric layer around the cord section. As seen in fig. 7, note the cable section is inserted between a compression section rubber pad (42) and a tension upper tension section rubber pad (35). Note in col. 8, lines 65-75, Kilborn et al. clearly disclose the cable section is covered with rubber and fabric. This can be seen in fig. 7. It appears that applicant is referring to the first

step in make of the belt to determine the finished belt without referring to the other steps involved in the making of the belt. Note in col. 6, lines 4-19), Kilborn et al. clearly state that after the cushion layer is adhere to the cables and the cords, a layer of fabric is applied to the cushion layer which in turn is bonded to a layer fabric.

In addition, applicant contended that the cords are not individually tensioned and most significantly, maintaining individual tensioning while applying the jacket. In response, Kilborn et al. clearly disclose the cords are individually tensioned while applying the fabric (col. 8, line 68-73). Note Kilborn et al. clearly disclose the after tensioning the cables by the weights (18) the new section of the cable is covered with rubber and fabric. In addition, as well known in the art, the fabric material applied on the belt act as a jacket layer on the outer surface of the belt. Therefore, it must be concluded that the jacket is applied to the belt while the cables are under tension.

Regarding argument to claims 3, 33 and 37, it should be noted that it is inherent that any one of the cord that is not in alignment or not in proper tension will have to be adjust to be in proper alignment and tension with the other cords.

Regarding arguments to claims 9 and 20, the process for making the jacket or the outer layer of the belt is well known and it is inherent that such process is included during the manufacturing of the outer layer rubber and fabric of Kilborn et al. Applicant contended that the Kilborn et al. reference do not teach or suggest any benefits of to incorporating a shaping device and cooling as required. In response, Kilborn et al. is not concerned about making the jacket but applying the jacket on the tension member.

Therefore, such method is only inherent in making the jacket but not the application of the jacket on the tension member.

Regarding arguments to claim 16, it should be noted that Kilborn et al. acknowledges tensioning the belt individually by maintaining different tension of the belt. (see col. 1, lines 34-55). Kilborn teaches that it is well known that belts with long strands require cords with different tension. Therefore, it is possible to maintain the cord with different tension depending length of the cords.

Regarding arguments relating claims 5-7, 14, 18, 21-23, 26-27, 41, applicant contended that that there is no reference of a waxless polyurethane/urethane and it is not reasonable to assume that a special waxless polyurethane would be used when conventional polyurethane/urethane typically includes a wax. In response, there is no teaching that wax is inherently present in conventional polyurethane or urethane. In addition, no such evidence exists to substantiate the teaching that wax is inherently present in polyurethane or urethane. Polyurethane in certain products includes wax as a releasing agent. However, polyurethane contains various type of releasing agents such ash oil base, silicone or water base. Harper clearly discloses producing polyurethane moldings with release agents that produces clean, blemish-free and adhesive free surfaces which are suitable for painting. As well known in the art, release agents are use in moldings, in particular, polyurethane or urethane molding, to allow the quick and easy removal of the polyurethane from the molding. In addition, the release agent is such they all react to heat faster than the polyurethane so that they can be release before any solidification take place. Harper, is aware of the lower melting temperature of

the release agent and decides to use a silicone release agent in order to prevent the surface of the mold obtaining any oil or wax. Harper also teaches the use of waxless polyurethane by indicating that it is well known in the art that the conventional method uses polyurethane moldings is first prepared by coating the surface with oily, wax or silicone release agent (col. 1, lines 45). In addition, Harper also discloses various type of mold release agent in the form hydrophobic, oily or waxy organic or silicone (col. 5, lines 3-10). Therefore, as understood the use of wax as a release agent is not inherent and is a choice of use.

Applicant has not clearly clarified the meaning of waxless polyurethane. It appears that applicant is using such content to mean that wax is an inherent part of the composition of polyurethane, which is not the case. Wax is only used as one of the releasing agent of polyurethane. Therefore, one of ordinary skill in the art would be able to use polyurethane with a releasing agent other than wax, such as oil silicone releasing agents as mentioned above. In addition, Harper clearly explains the composition of polyurethane (col. 5, 39-col.6, line 33) without ever mentioning a wax material or component as part of the polyurethane composition. Therefore, it must be concluded that wax is not an integral part of the composition of polyurethane.

In addition, the use of wax on the surface of the belt would be disadvantageous, since wax tends to crack under prolong temperature and produce a waxy scale on the belt. Furthermore, the wax would make it very difficult to proving any marking on the surface of the belt. Such marking is used to provide information of the belt. Therefore,

the belt of Prewo would be improved by having a polyurethane material without a waxy surface. Therefore, for this reason, the rejection is deemed proper.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Marcus Charles/

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